ABSTRACT OF THE DISCLOSURE

BONE MORPHOGENETIC PROTEIN-2 IN THE TREATMENT AND DIAGNOSIS OF CANCER

The present invention pertains to the use of BMP-2, which is overexpressed in most common cancers, as 1) a target for cancer treatment therapies and 2) a means to diagnose cancer. The therapeutic component of this invention involves administering to a patient a composition that inhibits bone morphogenetic-2 activity. Such inhibition may be accomplished by ligands or antibodies that bind to BMP-2 or BMP-2 receptors. It may also be achieved by preventing the processing of pro-BMP-2, or blocking transcription or replication of BMP-2 DNA or translation of BMP-2 mRNA. The diagnostic component of the invention involves measuring the BMP-2 level in biological samples from both a patient and a subject and comparing those levels. Elevated levels of BMP-2 in the patient compared to the non-cancerous subject indicate cancer.